

EXHIBIT NO.

12

Enterovirus Blamed for Polio-Like Acute Flaccid Myelitis in Kids

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Latest Infectious Disease News

By  on 10/24/2019 2:00 PM

Source: MedicineNet Health News

Researchers announced new evidence Monday that a virus is responsible for the sudden  caused by    .

The exact cause of  has not been determined. But in the study published in *Nature*, scientists discovered immune reactions to two types of  in 70% of fluid samples from children with AFM. These reactions appeared in only 6% of samples from a control group of children with neurological conditions other than AFM.

Specifically, the study identified antibodies for   D68 and A71.

 D68 () caused a nationwide outbreak from Aug. 2014 to Jan. 2015, according to the CDC. During this outbreak, the virus sickened 1,153 people in 49 states and the District of Columbia.

Almost all the individuals infected were children who also had a history of  or , the CDC said. Health officials identified the virus in 14 patients who died during the outbreak.

What Is Acute Flaccid Myelitis?

is an extremely rare condition of the nervous system that causes the muscles and reflexes of the body to weaken, the CDC says. It may be spread to humans by mosquitoes, but people cannot spread AFM.

AFM symptoms include a sudden onset of arm or leg and loss of muscle tone and reflexes, according to the CDC. Other symptoms can include facial droop, droop, difficulty moving the eyes, facial , slurred speech, or problems with swallowing. The most serious potential symptom is respiratory failure.

Lab tests are required to diagnose AFM. The CDC says the rare condition occurs in less than one in a million people in the United States every year.

The agency says scientists have proposed a variety of causes of AFM, including , but also environmental toxins and genetic disorders.

What Is Enterovirus?

infections are extremely common. They belong to the family of RNA , according to . He said most people infected with enteroviruses have mild symptoms or none at all. Why some of these cases develop into AFM is unknown.

Unlike AFM itself, enterovirus infections are highly , Dr. Davis said. Even if they do not develop AFM, people infected with enterovirus may nonetheless experience significant health symptoms:

- : nasal discharge, , mild , mild malaise
- (low oxygen in the blood): , , , rapid , skin coloration change (bluish to cherry red), rapid rate

- Aseptic ~~herpetic~~: most common among infants and children; may also occur with a ~~fever~~ (on face, neck, and extremities), ~~headache~~, painful ~~conjunctivitis~~, ~~otitis media~~, body aches, ~~nausea~~, ~~vomiting~~, ~~diarrhea~~, and ~~conjunctivitis~~, irritability
- ~~herpetic conjunctivitis~~ (hemorrhagic): ~~conjunctivitis~~, bleeding seen in the whites of the eyes, ~~photophobia~~ (avoidance of light due to discomfort)
- Myopericarditis: ~~fever~~, ~~malaise~~, ~~fatigue~~, ~~weakness~~
- ~~herpetic gingivostomatitis~~: small flat sores on the oral mucosa (~~cheeks~~ and soft palate) that may produce ~~ulceration~~ and ulcerate
- Pleurodynia: intermittent ~~discomfort~~ usually over the lower part of the rib cage; some individuals may have a plural friction rub that can be heard when the doctor examines the chest with a stethoscope
- ~~herpetic whitlow and periorificial dermatitis (HWD)~~: small nodules and ~~vesicles~~ that are tender and appear gray that occur on the hands, ~~face~~, and in the oral ~~cavity~~
- ~~herpetic encephalitis~~: Symptoms range from lethargy and drowsiness to personality changes, ~~confusion~~, and ~~seizures~~.